

## ABSTRACT

A system for processing wafers includes a robot moveable within an enclosure to load and unload workpieces into and out of workpiece processors. A processor includes an upper rotor having alignment pins, and a lower rotor having  
5 one or more openings for receiving the alignment pins to form a processing chamber around the workpiece. The alignment pins center the workpiece relative to a rotor spin axis and to an etch or drain groove in the upper rotor. A first fluid outlet delivers processing fluid to a central region of the workpiece. The processing fluid is distributed across the workpiece surface via centrifugal force generated by spinning  
10 the processing chamber. Purge gas is optionally delivered into the processing chamber through an annular opening around the first fluid outlet to help remove processing fluid from the processing chamber.